





OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/757,788A

DATE: 01/07/2003 TIME: 14:03:51

Input Set : A:\pto.vsk.txt

- 3 <110> APPLICANT: Anderson, Keith
- 4 Agerso, Henrik
- 6 <120> TITLE OF INVENTION: Transepithelial Delivery of
- 7 GLP-Derivatives
- 9 <130> FILE REFERENCE: 6116.200-US
- 11 <140> CURRENT APPLICATION NUMBER: US 09/757,788A
- C--> 12 <141> CURRENT FILING DATE: 2002-12-13
 - 14 <150> PRIOR APPLICATION NUMBER: US 60/177,002
 - 15 <151> PRIOR FILING DATE: 2000-01-19
 - 17 <150> PRIOR APPLICATION NUMBER: DK 2000 00030
 - 18 <151> PRIOR FILING DATE: 2000-01-11
 - 20 <160> NUMBER OF SEQ ID NOS: 5
 - 22 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 - 24 <210> SEQ ID NO: 1
 - 25 <211> LENGTH: 39
 - 26 <212> TYPE: PRT
 - 27 <213> ORGANISM: Artificial Sequence
 - 29 <220> FEATURE:
 - 30 <223> OTHER INFORMATION: Synthetic
- W--> 32 <221> NAME/KEY: MUTAGEN
 - 33 <222> LOCATION: 2
 - 34 <223> OTHER INFORMATION: Xaa = Ala, Gly, Ser, Thr, Leu, Ile, Val, Glu Asp,
 - 35 Met or Lys
- W--> 37 <221> MUTAGEN
 - 38 <222> LOCATION: 3
 - 39 <223> OTHER INFORMATION: Xaa = Glu, Asp, or Lys
- W--> 41 <221> MUTAGEN
 - 42 <222> LOCATION: 5
 - 43 <223> OTHER INFORMATION: Xaa =Thr, Ala, Gly, Ser, Leu, Ile, Val, Glu, Asp,
 - 44 or Lys
- W--> 46 <221> MUTAGEN
 - 47 <222> LOCATION: 8
 - 48 <223> OTHER INFORMATION: Xaa = Ser, Ala, Gly, Thr, Leu, Ile, Val, Glu, Asp,
 - 49 or Lys
- W--> 51 <221> MUTAGEN
 - 52 <222> LOCATION: 10
 53 <223> OTHER INFORMATION: Xaa = Val, Ala, Gly, Ser, Thr, Leu, Ile, Tyr, Glu,
- 54 Asp, or Lys
- W--> 56 <221> MUTAGEN
 - 57 <222> LOCATION: 11
 - 58 <223> OTHER INFORMATION: Xaa = Ser, Ala, Gly, Thr, Leu, Ile, Val, Glu, Asp
- 59 or Lys
- W--> 61 <221> MUTAGEN

RAW SEQUENCE LISTING DATE: 01/07/2003 PATENT APPLICATION: US/09/757,788A TIME: 14:03:51

Input Set : A:\pto.vsk.txt

- 62 <222> LOCATION: 12
- 63 <223> OTHER INFORMATION: Xaa = Ser, Ala, Gly, Thr, Leu, Ile, Val, Glu, Asp,
- 64 or Lys
- W--> 66 <221> MUTAGEN
 - 67 <222> LOCATION: 13
 - 68 <223> OTHER INFORMATION: Xaa = Tyr, Phe, Trp, Glu, Asp, or Lys
- W--> 70 <221> MUTAGEN
 - 71 <222> LOCATION: 14
 - 72 <223> OTHER INFORMATION: Xaa = Leu, Ala, Gly, Ser, Thr, Leu, Ile, Val, Glu,
 - 73 Asp, or Lys
- W--> 75 <221> MUTAGEN
 - 76 <222> LOCATION: 15
 - 77 <223> OTHER INFORMATION: Xaa = Glu, Asp, or Lys
- W--> 79 <221> MUTAGEN
 - 80 <222> LOCATION: 16
 - 81 <223> OTHER INFORMATION: Xaa = Gly, Ala, Ser, Thr, Leu, Ile, Val, Glu, Asp,
 - 82 or Lys
- W--> 84 <221> MUTAGEN
 - 85 <222> LOCATION: 17
 - 86 <223> OTHER INFORMATION: Xaa = Gln, Asn, Arg, Glu, Asp, or Lys
- W--> 88 <221> MUTAGEN
 - 89 <222> LOCATION: 18
 - 90 <223> OTHER INFORMATION: Xaa = Ala, Gly, Ser, Thr, Leu, Ile, Val, Arg, Glu,
 - 91 Asp, or Lys
- W--> 93 <221> MUTAGEN
 - 94 <222> LOCATION: 19
 95 <223> OTHER INFORMATION: Xaa = Ala, Gly, Ser, Thr, Leu, Ile, Val, Glu, Asp,
 - 96 or Lys
- W--> 98 <221> MUTAGEN
 - 99 <222> LOCATION: 20
 - 100 <223> OTHER INFORMATION: Xaa = Lys, Arg, Gln, Glu, Asp or His
- W--> 102 <221> MUTAGEN
 - 103 <222> LOCATION: 21
 - 104 <223> OTHER INFORMATION: Xaa = Glu, Asp or Lys
- W--> 107 <221> MUTAGEN
 - 108 <222> LOCATION: 24
 - 109 <223> OTHER INFORMATION: Xaa = Ala, Gly, Ser, Thr, Leu, Ile, Val, Glu, Asp,
 - 110 or Lys
- W--> 112 <221> MUTAGEN
 - 113 <222> LOCATION: 25
 - 114 <223> OTHER INFORMATION: Xaa =Trp, Phe, Tyr, Glu, Asp, or Lys
- W--> 117 <221> MUTAGEN
 - 118 <222> LOCATION: 26
 - 119 <223> OTHER INFORMATION: Xaa = Leu, Gly, Ala, Ser, Thr, Ile, Val, Glu, Asp, or Lys
- W--> 121 <221> MUTAGEN
 - 122 <222> LOCATION: 27
 - 123 <223> OTHER INFORMATION: Xaa = Val, Gly, Ala, Ser, Thr, Leu, Ile, Glu, Asp, or Lys
- W--> 125 <221> MUTAGEN
 - 126 <222> LOCATION: 28

RAW SEQUENCE LISTING DATE: 01/07/2003 PATENT APPLICATION: US/09/757,788A TIME: 14:03:51

Input Set : A:\pto.vsk.txt

- 127 <223> OTHER INFORMATION: Xaa = Lys, Arg, Glu, Asp, or His W--> 129 <221> MUTAGEN
 130 <222> LOCATION: 29
 - 131 <223> OTHER INFORMATION: Xaa = Gly, Ala, Ser, Thr, Leu, Ile, Val, Glu, Asp or Lys
- W--> 133 <221> MUTAGEN
 - 134 <222> LOCATION: 30
 - 135 <223> OTHER INFORMATION: Xaa = Arg, Lys, Glu, Asp, or His
- W--> 137 <221> MUTAGEN
 - 138 <222> LOCATION: 31
- 139 <223> OTHER INFORMATION: Xaa = Gly, Ala, Ser, Thr, Leu, Ile, Val, Glu, Asp, or Lys or is deleted
- W--> 141 <221> MUTAGEN
 - 142 <222> LOCATION: 32
 - 143 <223> OTHER INFORMATION: Xaa = Arg, Lys, Glu, Asp, or His, or is deleted
- W--> 145 <221> MUTAGEN
 - 146 <222> LOCATION: 33
 - 147 <223> OTHER INFORMATION: Xaa = Arg, Lys, Glu, Asp, or His, or is deleted
- W--> 149 <221> MUTAGEN
 - 150 <222> LOCATION: 34
 - 151 <223> OTHER INFORMATION: Xaa = Asp, Glu, or Lys, or is deleted
- W--> 153 <221> MUTAGEN
 - 154 <222> LOCATION: 35
 - 155 <223> OTHER INFORMATION: Xaa = Phe, Trp, Tyr, Glu, Asp, or Lys, or is deleted
- W--> 157 <221> MUTAGEN
 - 158 <222> LOCATION: 36
 - 159 <223> OTHER INFORMATION: Xaa = Pro, Lys, Glu, or Asp, or is deleted
- W--> 161 <221> MUTAGEN
 - 162 <222> LOCATION: 37
 - 163 <223> OTHER INFORMATION: Xaa = Glu, Asp, or Lys, or is deleted
- W--> 165 <221> MUTAGEN
 - 166 <222> LOCATION: 38
 - 167 <223> OTHER INFORMATION: Xaa = Glu, Asp, or Lys, or is deleted
- W--> 169 <221> MUTAGEN
 - 170 <222> LOCATION: 39
 - 171 <223> OTHER INFORMATION: Xaa = Val, Glu, Asp, or Lys, or is deleted
- W--> 173 <400> 1
- W--> 174 His Xaa Xaa Gly Xaa Phe Thr Xaa Asp Xaa Xaa Xaa Xaa Xaa Xaa Xaa 175 1 5 10 15
- W--> 178 Xaa Xaa Xaa Xaa Xaa Xaa
 - 179 35
 - 181 <210> SEQ ID NO: 2
 - 182 <211> LENGTH: 31
 - 183 <212> TYPE: PRT
 - 184 <213> ORGANISM: Artificial Sequence
- W--> 185 <220> FEATURE:
 - 186 <223> OTHER INFORMATION: Synthetic
 - 188 <400> SEQUENCE: 2
 - 189 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu

RAW SEQUENCE LISTING DATE: 01/07/2003 PATENT APPLICATION: US/09/757,788A TIME: 14:03:51

Input Set : A:\pto.vsk.txt

Output Set: N:\CRF4\01072003\I757788A.raw

```
190 1
     191 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro
     192 20
                                         25
     194 <210> SEQ ID NO: 3
     195 <211> LENGTH: 31
     196 <212> TYPE: PRT
     197 <213> ORGANISM: Artificial Sequence
     199 <220> FEATURE:
     200 <223> OTHER INFORMATION: Synthetic
     202 <400> SEQUENCE: 3
     203 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
     205 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Tyr
            20
                                         25
     208 <210> SEQ ID NO: 4
     209 <211> LENGTH: 40
     210 <212> TYPE: PRT
     211 <213> ORGANISM: Artificial Sequence
W--> 212 <220> FEATURE:
     213 <223> OTHER INFORMATION: Synthetic
     215 <400> SEQUENCE: 4
     216 His Ser Asp Gly Thr Phe Ile Thr Ser Asp Leu Ser Lys Gln Met Glu
     217 1
                         5
                                             10
     218 Glu Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro
     219
                    20
                                         25
     220 Ser Ser Gly Ala Pro Pro Pro Ser
                35
     223 <210> SEQ ID NO: 5
     224 <211> LENGTH: 40
     225 <212> TYPE: PRT
     226 <213> ORGANISM: Artificial Sequence
W--> 227 <220> FEATURE:
     228 <223> OTHER INFORMATION: Synthetic
     230 <400> SEQUENCE: 5
     231 His Gly Glu Gly Thr Phe Ile Thr Ser Asp Leu Ser Lys Gln Met Glu
                         5
                                             10
     233 Glu Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro
     235 Ser Ser Gly Ala Pro Pro Pro Ser
```

35

RAW SEQUENCE LISTING ERROR SUMMARY PATENT APPLICATION: US/09/757,788A

DATE: 01/07/2003 TIME: 14:03:52

Input Set : A:\pto.vsk.txt

Output Set: N:\CRF4\01072003\I757788A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 2,3,5,8,10,11,12,13,14,15,16,17,18,19,20,21,24,25,26,27,28

Seq#:1; Xaa Pos. 29,30,31,32,33,34,35,36,37,38,39

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/757,788A TIME: 14:03:52

DATE: 01/07/2003

Input Set : A:\pto.vsk.txt

```
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:32 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:37 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:41 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:46 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:51 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:56 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:61 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:66 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:70 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:75 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:79 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:84 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:88 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:93 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:98 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:102 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:107 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:112 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:117 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:121 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:125 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1 L:129 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1 L:133 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:137 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:141 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:145 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:149 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:153 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:157 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:161 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:165 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:169 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:173 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:174 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:176 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:16
L:178 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:32
L:185 M:283 W: Missing Blank Line separator, <220> field identifier
L:212 M:283 W: Missing Blank Line separator, <220> field identifier
L:227 M:283 W: Missing Blank Line separator, <220> field identifier
```